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19. The macromer of claim 1 wherein the dry macromer absorbs at least about 10% in weight of water.

20. The macromer of claim 1 wherein the molecular weight of the macromer is at least 1000 Daltons.

21. The macromer of claim 1 wherein the molecular weight of the macromer is at least 2000 Daltons. 5

22. The macromer of claim 1 wherein the molecular weight of the macromer is at least 4000 Daltons.

23. The macromer of claim 1 further comprising at least two hydrophilic blocks. 10

24. The macromer of claim 1 provided in a pharmaceutically acceptable carrier.

25. The macromer of claim 24 wherein the macromer is provided in a carrier suitable for parenteral administration.

26. The macromer of claim 1, wherein the thermally sensitive region is selected from the group consisting of poloxamers, meroxapols, poloxamines, polyvinyl alcohol, polyvinyl-pyrrolidone, polyacrylic acids, esters, amides, celluloses, peptides and proteins, dextrans and other polysaccharides, polyalkylene oxides, and natural gums. 15 20

27. A macromer which is capable of forming a gel, the macromer comprising at least four covalently linked polymeric blocks, wherein:

- a) at least one polymer block is hydrophilic and each hydrophilic polymer block individually has a water solubility of at least 1 gram/liter; 25
- b) at least two blocks are sufficiently hydrophobic to cause the macromer to aggregate to form micelles in an aqueous continuous phase;
- c) the macromer comprises at least one crosslinkable group; 30

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d) the macromer comprises at least one thermally sensitive region;

e) a solution of the macromer is capable of gelling or crosslinking to produce a hydrogel with a temperature dependent volume; and

f) the thermally sensitive region comprises a poloxamer backbone extended with oligolactate moieties, wherein the poloxamer-lactate copolymer is terminated by acrylate moieties.

28. A macromer which is capable of forming a gel, the macromer comprising at least four covalently linked polymeric blocks, wherein:

- a) at least one polymer block is hydrophilic and each hydrophilic polymer block individually has a water solubility of at least 1 gram/liter;
- b) at least two blocks are sufficiently hydrophobic to cause the macromer to aggregate to form micelles in an aqueous continuous phase;
- c) the macromer comprises at least one crosslinkable group;
- d) the macromer comprises at least one thermally sensitive region;
- e) a solution of the macromer is capable of gelling or crosslinking to produce a hydrogel with a temperature dependent volume; and
- f) the thermally sensitive region comprises an acrylate capped polyglycolide derivatized poloxamer of about 30% polypropylene oxide content.

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